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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,579	01/25/2002	Mohamed S. Hamed	CAEP:101_US_	4685
24041	7590	05/18/2004	EXAMINER	
SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/056,579

Applicant(s)

HAMED ET AL.

Examiner

Minh-Chau T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durdag et al (6,193,774 B1).

Durdag et al disclose an apparatus for removal particulates located in an air stream in a thermal oven (col. 1, lines 7-10) comprising means to move air in the thermal oven (10) and a plurality of particulate removal members (100, 102, 104 & 106) secured to the inside wall (44) of the thermal oven and the members (100, 102, 104 & 106) projecting into the air stream (col. 4, lines 21-24). Each removal member comprises two planar members (100 & 102 in Fig. 6) to form a "V" shaped where the structure includes a vertex (col. 4, lines 34-37) pointing generally in the direction of the air stream (see 100 and 102 against the arrow air flow in Fig. 4), and the angles of the planar members range from 40 degrees to greater than 90 degrees (col. 4, lines 51 and 64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide removal members in a thermal oven as taught by Durdag et al since the thermal oven with an oven gas decontamination system such as removal members or baffles would reduce fouling of the convection oven components and surfaces.

***Response to Arguments***

Applicant's arguments filed on March 8, 2004 have been fully considered but they are not persuasive.

Applicant argues that "none of the cited Crafton and Chawla references discloses a closed loop oven system for separating sand from an air stream having a plurality of removal members projecting into the air stream". The Examiner now drops both Crafton and Chawla references and newly introduces the Durdag et al reference to show a closed loop oven apparatus for removal particulates located in an air stream in a thermal oven (col. 1, lines 7-10) comprising means to move air in the thermal oven (10) and a plurality of particulate removal members (100, 102, 104 & 106) secured to the inside wall (44) of the thermal oven and the members (100, 102, 104 & 106) projecting into the air stream (col. 4, lines 21-24). Each removal member comprises two planar members (100 & 102 in Fig. 6) to form a "V" shaped where the structure includes a vertex (col. 4, lines 34-37) pointing generally in the direction of the air stream (see 100 and 102 against the arrow air flow in Fig. 4), and the angles of the planar members range from 40 degrees to greater than 90 degrees (col. 4, lines 51 and 64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide removal members in a thermal oven as taught by Durdag et al since the thermal oven with an oven gas decontamination system such as removal members or baffles would reduce fouling of the convection oven components and surfaces, as claimed. The recitation of "removal sand in a thermal sand removal oven" has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not

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depending for completeness upon the introductory clause. See Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Applicant's arguments with respect to claims 1-10 have been thoroughly considered but are moot in view of the new ground(s) of rejection as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit: 1724**  
**May 13, 2004**